

**SAM FORDYCE FIRE BURNED AREA REHABILITATION PLAN**

**U.S. FISH AND WILDLIFE SERVICE  
LOWER RIO GRANDE VALLEY NATIONAL WILDLIFE REFUGE  
SEPTEMBER 2005**

**FIRE DATE:** July 17, 2005

**AGENCY/UNIT:** U.S. Fish and Wildlife Service  
Lower Rio Grande Valley National Wildlife Refuge  
Route 2, Box 202a  
Alamo Texas, 78516  
Phone: 956-784-7500

**LOCATION/SIZE:** Sullivan, Hidalgo County, Texas  
23.5 acres

**PREPARED BY:** U.S. Department of Interior  
U.S. Fish and Wildlife Service  
Chris Best, Plant Ecologist

Submitted By:

Date:

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Jeff Rupert, Refuge Manager, Lower Rio Grande Valley National Wildlife Refuge

**BURNED AREA REHABILITATION PLAN REVIEW AND APPROVAL**

**I. Project Leader approval that the Burned Area Rehabilitation Plan meets approved land management plan management objectives.**

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*Kenneth L. Merritt, Project Leader, South Texas Refuge Complex*

Date

**II. Regional Fire Management Coordinator concurrence that the plan fits the technical definition for use of Rehabilitation finding.**

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*Regional Fire Management Coordinator, Region 2*

Date

**III. Rehabilitation Funding Approval (check one box below):**

Approved

Approved with Revision (see attached)

Disapproved

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*Regional Director, Region 2*

Date

**Sam Fordyce North Fire**  
**(21550-9141-BZ97)**  
**BURNED AREA REHABILITATION PLAN**

**UNIT:** Lower Rio Grande Valley NWR, Sam Fordyce North Tract

**LOCATION:** Sillivan, Hidalgo County, Texas

**DATE:** September 9, 2005

**PREPARED BY:** Chris Best, Plant Ecologist

## EXECUTIVE SUMMARY

### Introduction

This Burned Area Rehabilitation Plan has been prepared in accordance with Department of the Interior and U.S. Fish and Wildlife Service (FWS) policy, the Lower Rio Grande Valley (LRGV) National Wildlife Refuge (NWR) Comprehensive Conservation Plan (CCP), and the South Texas Refuge Complex (STRC) Fire Management Plan. This plan provides rehabilitation recommendations for all land burned within the Sam Fordyce North Fire. Primary objectives of the Sam Fordyce North Fire Burned Area Rehabilitation Plan are to:

1. Suppress wildfires and protect lives and property through integrated hazardous fuel management.
2. Reduce hazardous stands of introduced, invasive grass species, to less than 5% total vegetative cover.
3. Restore a stable shrubland ecosystem at the burn site, utilizing native plant species and restoration techniques that will minimize recolonization by introduced grasses and the susceptibility of this site to wildfire.
4. Restore the wildlife habitat corridor in order to enhance the recovery of Federally-listed endangered species, including Walker's Manioc, as well as flora and faunal species protected by the State of Texas.

This plan implements the recommendations for rehabilitation that were documented in the Sam Fordyce North Burned Area Assessment Report by the LRGV NWR Plant Ecologist on September 9, 2005. This assessment includes:

1. Background information on the fire, including the cause, fuels, and impacts to infrastructure and historic sites.
2. An accurate map of the area affected by the fire.
3. Site history and land use, including analysis of aerial photography from 1975, 1983, 1987 and 2002.
4. Fire impacts on vegetation, wildlife and other natural resources, including rare, threatened and endangered species.
5. Compilation of site characteristics that are pertinent to restoration and management, including climate, geology, topography, soils, existing and potential vegetation, and wildlife habitat values.
6. Specific recommendations for restoration, monitoring and management of natural resources at the site.
7. Estimate costs associated with the recommended specifications.

The Burned Area Assessment Report is attached in Appendix V. Appendix II contains the National Environmental Policy Act (NEPA) compliance documentation summary. The Burned Area Rehabilitation Maps are found in Appendix III. Appendix IV contains photographic documentation. Site monitoring reports and other supporting documentation are included in Appendix V. Part E is a summary of costs by jurisdiction. Rehabilitation treatment specifications and monitoring are described in Part F.

### Fire Background

The Sam Fordyce North Fire (21550-9141-BZ97) was discovered on the Sam Fordyce North tract of LRGV NWR on July 13, 2005. It was contained on July 15 and declared out on July 17, 2005. The burned area is bounded on the south by the Military Road (caliche) and on the west by the Sam Fordyce Road (caliche). The perimeter on the north and east is a broad arc through former agricultural fields. The sole source of fuel was dense, dry buffelgrass. The cause of ignition was a lightning strike (observed by acting FMO Pat Pearson); the fire was driven by prevailing southeast winds.

### **Fire Damages and Threats to Human Safety and Natural and Cultural Resources**

The fire perimeter was mapped with d-GPS on September 6, 2005, and the burned area was determined to be 23.5 ac (see attached map, Sam Fordyce Burn 2005). The entire burned area is contained on refuge-owned land. The fire damaged portions of the refuge-owned fence along the Sam Fordyce Road. No other damages to infrastructure or historic sites occurred. However, if the fire had not been controlled, it could have damaged power lines along Highway 83. Furthermore, smoke drifting across the highway could create significant hazards to motorists.

The fire burned through a sparse stand of Texas ebony and huisache trees that were planted in 1990. Additionally, honey mesquite, Texas palo verde, lotebush and other native trees and shrubs have established spontaneously at low densities. These trees and shrubs range from 1 to 3 m in height. Some of the native woody plants were killed outright by the fire, while the majority were top-killed and are coppicing from the bases of the trunks. The herbaceous vegetation consists of nearly 100% cover of buffelgrass (*Pennisetum ciliare*), an introduced, invasive grass, which recovered quickly after the fire. The major impact of the fire to native vegetation was the reduction of the size, density and cover of native trees and shrubs, and the stimulation of vigorous regrowth of buffelgrass. Although buffelgrass is a valuable forage grass for domestic livestock, it has very little value to rodents, quail and other seed-eating fauna, as well as the predators that depend on these prey. The rapid regeneration of buffelgrass, and the ability of this grass to suppress native plants (perhaps through allelopathy), creates a fire-adapted non-native plant community that promotes, and is perpetuated by, frequent wildfires.

The fire perimeter reached, but did not damage, an interesting historic site, a concrete swimming pool (see attached photographs). This swimming pool was constructed for the benefit of National Guard troops stationed at this site in 1916-1917, and is the only remaining structure of the former town of Sam Fordyce.

The recommended treatment of the burned area consists of thorough eradication of invasive non-native grass species, followed by restoration of native shrubland vegetation that is far less susceptible to wildfire. The invasive grass species, primarily buffelgrass, will be treated 6 times over the course of 12 to 18 months with glyphosate herbicide. Follow-up spot treatments with glyphosate and/or imazapyr herbicides may be made following establishment of native woody plants. The timing of repeated herbicide treatments is critical for success.

Restoration of native shrubland will be accomplished, following effective control of buffelgrass, by transplanting seedlings of native trees and shrubs, and direct seeding of native herbaceous plants. The rapid establishment of native herbaceous plants, consisting of sub-shrubs, grasses and forbs that reproduce quickly in the field, will minimize subsequent re-invasion by buffelgrass. Transplantation will be accomplished between September 15 and December 15, 2007, provided that natural rainfall has

restored available soil moisture to a depth of no less than 18 inches. Direct seeding will be conducted immediately prior to seedling transplant. Seedlings for this project will be grown under contract by local vendors; these contracts must be established no later than January, 2007.

The burn site occurred in a former agricultural field, where there is an outcrop of caliche. The restored vegetation will be modeled on existing native vegetation occurring on caliche outcrops on an adjacent portion of Sam Fordyce North tract, as well as Havana, Yturria Brush and other tracts in this vicinity. This consists of small trees and shrubs in a matrix of native grass and forb species. Following eradication of buffelgrass, and restoration of native vegetation, the caliche outcrops may be appropriate sites for pilot reintroduction of Walker's Manioc, a Federally-listed endangered species.

Due to the relatively small size of the Sam Fordyce North fire, only one Burned Area Assessment Report was.

### **Lower Rio Grande Valley Management Requirements**

The suppression of wildfire and restoration of native vegetation are provisions of the refuge Comprehensive Conservation Plan (established as an Interim Comprehensive Management Plan and Draft Environmental Assessment, approved by Regional Director Lynn B. Starnes, September 24, 1997):

#### S.5.1.A. Acquisition and Land Status Objectives (p. 42).

2. Acquire lands (tracts) that will: (1) Provide for the protection of endangered species; (2) Assist in the achievement of a contiguous river wildlife corridor; (3) Enlarge established brush tracts or create corridors connecting tracts of native habitat; (4) Enhance or connect existing refuge tracts not on or near the river; and (5) Protect isolated tracts of desirable habitat.

#### S.5.1.D. Revegetation and Habitat Management Objectives (pp 44-46).

1. Continue to protect and restore refuge lands containing any of the 11 biotic communities identified in the Land Protection Plan (LPP).
2. Continue to revegetate up to 1000 acres of refuge cropland per year with appropriate native plant species...Prioritize revegetation of fields according to the following scale (with A being the highest priority): A) fields located immediately adjacent to the Rio Grande which would directly link habitat corridor segments.
3. The primary objective of revegetation is to restore high-quality habitat on disturbed sites (mainly croplands), modeled on undisturbed sites with similar characteristics, in the minimum length of time.
4. a) Provide a diversity and composition of native plant species modeled on the vegetation of undisturbed sites with similar characteristics.  
  
d) Minimize the impact of perennial exotic species, the most significant of which are the exotic grass species and Russian Thistle (*Salsola kali*).

S. 5.1.E. Fire Management (p. 47).

1. Use a combination of strategies such as discing [sic], prescribed fire, and herbicides (depending on location and other factors) to control and lessen fuel loads in areas susceptible to high growth levels of bermuda and other exotic grasses and Russian thistle, especially tracts within the Hidalgo County District as 40% of all suppressed fires in the LRGV are in that area. Areas would not be reforested until these exotics are removed.
2. Presuppression / Suppression --- The refuge will maintain a standing force of fire program personnel whose primary duty will be to detect and suppress those wildfires found on the refuge.

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**PART A - FIRE LOCATION AND BACKGROUND INFORMATION**

Fire Name	Sam Fordyce North
Fire Number	21550-9141-BZ97
Agency Unit	SRR
Region	2
State	TX
County(s)	Hidalgo
Ignition Date/Cause	07-13-05 / Lightning
Zone	SACC
Date Fully Contained	07-17-05
Jurisdiction	FWS 23.5 Acres
<i>other jurisdictions</i>	None
Total Acres	23.5 Acres
Date Contained	07-15-05

**PART B - NATURE OF PLAN**

Type of Action (check one box below)

<input checked="" type="checkbox"/>	Initial Submission
<input type="checkbox"/>	Amendment to the Initial Submission

## **PART C - REHABILITATION ASSESSMENT**

### Rehabilitation Objectives

1. Suppress wildfires and protect lives and property through integrated hazardous fuel management.
2. Reduce the primary fuel source at the burn site, which is a dense stand of introduced, invasive grass species, to less than 5% total vegetative cover.
3. Restore a stable shrubland ecosystem at the burn site, utilizing native plant species and restoration techniques that will minimize recolonization by invasive grasses and susceptibility of this site to wildfire.
4. Restore the integrity of the wildlife habitat corridor, in order to enhance the recovery of Federally-listed endangered species, including Walker's Manioc, as well as faunal species protected by the State of Texas.

## **PART D - TEAM ORGANIZATION, MEMBERS, AND RESOURCE ADVISORS**

### I. Burned Area Emergency Response Team Members and Resource Advisors.

<b>Position</b>	<b>Team Member (Agency)</b>
Team Leader, Plan Preparation	Chris Best, Plant Ecologist, LRGV NWR (FWS)
Public Information	Patty Alexander, Public Outreach Specialist, STRC (FWS)
Operations	Patrick Pearson, FMO STRC (FWS)
NEPA Compliance & Planning	Ernesto Reyes, Ecological Services (FWS)
Vegetation, GIS and Photography	Chris Best, Plant Ecologist, LRGV NWR (FWS)
Wildlife Biologist	Mitchell Sternberg, Wildlife Biologist, LRGV NWR FWS
Fire Ecologist, Resource Advisor	Mark Kaib, Fire Ecologist Southwest Region FWS
Resource Advisor	Jeff Rupert, Refuge Manager, LRGV NWR FWS



**PART F - INDIVIDUAL SPECIFICATION**

<b>TREATMENT NAME</b>	Apply glyphosate herbicide	<b>PART E SPECIFICATION #</b>	1
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2006
<b>NFPORS TREATMENT TYPE *</b>	Chemical	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Apply glyphosate herbicide four times to 23.5-ac old at Sam Fordyce North burn.</p> <p><b>B. Location/(Suitable) Sites:</b> 23.5-ac old field</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>Apply 13.1 oz/ac (active ingredient) glyphosate herbicide in 5 – 10 gal water/ac, with 1.7 lb/ac NH4SO4, and surfactant and marking dye at label rates, with overhead boom sprayer. The refuge will supply the quantity of glyphosate herbicide, NH4SO4, surfactant and marking dye. Contractor shall supply all necessary spraying equipment, fuel, water and transport to site.</li> <li>Herbicide shall be applied to entire 23.5-ac area four times between October 1, 2005 and September 30, 2006, while target grass is actively growing. Refuge personnel will indicate when applications should be made (minimum of 1 week advance notice).</li> <li>From 10 to 20 days after each main application, herbicide shall be re-applied as described above to all areas that were not adequately treated during the main application, as evidenced by lack of herbicide symptoms (yellowing, wilting and tissue necrosis). Re-treatment is not necessary if specification number 4 has been met. Additional re-treatment(s) shall be made until Specification number 4 is met.</li> <li>Each of the 4 treatments (plus re-applications as necessary) is complete when untreated areas comprise less than 1% of the total treated area.</li> </ol> <p><b>D. Purpose of Treatment Specifications:</b> Eradicate all established buffelgrass bunches and buffelgrass germinating from seed.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will walk at least 10 transects through treated area, 7 – 10 days following treatment, and will map any untreated areas with GPS equipment. Refuge personnel will provide contract sprayer with maps showing location and size of untreated areas. Refuge personnel will inspect site within 10 days following re-treatment(s) to certify compliance with specifications listed in part C (above).</p>
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**II. LABOR, MATERIALS AND OTHER COST:**

<p>&lt; <b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).</p>	<b>COST / ITEM</b>
TOTAL PERSONNEL SERVICE COST	n/a
<p>&lt; <b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</p>	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<p>&lt; <b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b></p> <p>Glyphosate + adjuvants @\$15/ac x 23.5 ac x 4 applications x 1 year</p>	<b>COST / ITEM</b>
TOTAL MATERIALS AND SUPPLY COST	\$1,410

<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>		<b>COST / ITEM</b>
TOTAL TRAVEL COST		n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>		<b>COST / ITEM</b>
23.5 ac x \$65.00/ac x 4 applications		\$6,110
TOTAL CONTRACT COST		\$6,110

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2006	10/01/05	09/30/06	SC	acres	\$320	Invasive Grass Eradication	\$7,520
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$7,520</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
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<b>TREATMENT NAME</b>	Apply glyphosate herbicide, Old Field	<b>PART E SPECIFICATION #</b>	2
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2006, 2007
<b>NFPORS TREATMENT TYPE *</b>	Chemical	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Apply glyphosate herbicide one time to 23.5-ac old field at Sam Fordyce North burn.</p> <p><b>B. Location/(Suitable) Sites:</b> 23.5-ac old field</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>Apply 13.1 oz/ac (active ingredient) glyphosate herbicide in 5 – 10 gal water/ac, with 1.7 lb/ac NH<sub>4</sub>SO<sub>4</sub>, and surfactant and marking dye at label rates, with overhead boom sprayer. The refuge will supply the quantity of glyphosate herbicide, NH<sub>4</sub>SO<sub>4</sub>, surfactant and marking dye. Refuge shall supply all necessary spraying equipment, fuel, water and transport to site.</li> <li>Herbicide shall be applied to entire 23.5-ac area two times between October 1, 2005 and November 30, 2006, while target grass is actively growing.</li> <li>From 10 to 20 days after the main application, herbicide shall be re-applied as described above to all areas that were not adequately treated during the main application, as evidenced by lack of herbicide symptoms (yellowing, wilting and tissue necrosis). Re-treatment is not necessary if specification number 4 has been met. Additional re-treatment(s) shall be made until Specification number 4 is met.</li> <li>The treatment (plus re-applications as necessary) is complete when untreated areas comprise less than 1% of the total treated area.</li> </ol> <p><b>D. Purpose of Treatment Specifications:</b> Eradicate all established buffelgrass bunches and buffelgrass germinating from seed.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will walk at least 10 transects through treated area, 7 – 10 days following treatment, and will map any untreated areas with GPS equipment. Refuge personnel will provide contract sprayer with maps showing location and size of untreated areas. Refuge personnel will inspect site within 10 days following re-treatment(s) to certify compliance with specifications listed in part C (above).</p>
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**II. LABOR, MATERIALS AND OTHER COST:**

<p>&lt; <b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).</p>	<b>COST / ITEM</b>
GS 7 @ \$24/hr x 40 hours x 2 years	
TOTAL PERSONNEL SERVICE COST	\$1,920
<p>&lt; <b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</p>	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<p>&lt; <b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b></p>	<b>COST / ITEM</b>
Glyphosate + adjuvants @ \$15/ac x 23.5 ac x 2 years	
TOTAL MATERIALS AND SUPPLY COST	705
	<b>COST /</b>

< TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):	ITEM
TOTAL TRAVEL COST	n/a
< CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):	COST / ITEM
TOTAL CONTRACT COST	n/a

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	11/30/07	FA	acres	\$111.70	Invasive Grass Eradication	\$2,625
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$2,625</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	FA, M
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
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<b>TREATMENT NAME</b>	Rip seedling rows to 20" depth	<b>PART E SPECIFICATION #</b>	3
<b>NFPORS TREATMENT CATEGORY*</b>	Mechanical	<b>FISCAL YEAR(S) (list each year):</b>	2006
<b>NFPORS TREATMENT TYPE *</b>	Chemical	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Rip seedling rows to 20" depth, 9-ft apart, with single-shank ripper.</p> <p><b>B. Location/(Suitable) Sites:</b> 23.5-ac old field portion</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>Rip seedling rows to 20" depth with 3-pt single-shank ripper.</li> <li>Parallel seedling rows shall be ripped 9 ft apart.</li> </ol> <p><b>D. Purpose of Treatment Specifications:</b> Alleviate soil compaction in old farm field.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will visit site following operation to certify fulfillment of specifications listed in part C, above.</p>
--

**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
TOTAL PERSONNEL SERVICE COST	n/a
<b>&lt; EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<b>&lt; MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b> (All necessary material supplies were previously acquired by the Refuge).	<b>COST / ITEM</b>
TOTAL MATERIALS AND SUPPLY COST	n/a
<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
23.5 ac x \$25/ac	\$588

TOTAL CONTRACT COST \$588

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	08/01/06	09/15/06	SC	acres	\$25	Invasive Grass Eradication	\$588
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$588</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

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2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
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<b>TREATMENT NAME</b>	Seedlings	<b>PART E SPECIFICATION #</b>	4
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2006
<b>NFPORS TREATMENT TYPE *</b>	Biological	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>	Colonia Anzaldua	<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Produce seedlings of native trees and shrubs, according to standard contract specifications used by LRGV NWR (attached).</p> <p><b>B. Location/(Suitable) Sites:</b> Contract nursery(s).</p> <p><b>C. Design/Construction Specifications:</b></p> <p>Standard seedling contract is attached. Contractor(s) will produce seedlings and deliver to LRGV NWR on or before September 15, 2006.</p> <p><b>D. Purpose of Treatment Specifications:</b> Revegetate site of Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will inspect tree seedlings upon delivery to determine compliance with standard seedling contract specifications (attached).</p>
--

**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
TOTAL PERSONNEL SERVICE COST	n/a
<b>&lt; EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<b>&lt; MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
Plant Bands @\$0.049 each x 8,400	
TOTAL MATERIALS AND SUPPLY COST	\$412
<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
7,050 seedlings x \$0.91/seedling	
TOTAL CONTRACT COST	\$6,416

**SPECIFICATION COST SUMMARY**

<b>FISCAL YEAR</b>	<b>PLANNED INITIATION DATE (M/D/YYYY)</b>	<b>PLANNED COMPLETION DATE (M/D/YYYY)</b>	<b>WORK AGENT</b>	<b>UNITS</b>	<b>UNIT COST</b>	<b>PLANNED ACCOMPLISHMENTS</b>	<b>PLANNED COST</b>
FY2006	01/15/06	09/15/06	C	Seedling	\$0.91	Produce seedlings for revegetation	\$6,416
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$6,416</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

<b>1. Estimate obtained from 2-3 independent contractual sources.</b>	C
<b>2. Documented cost figures from similar project work obtained from local agency sources.</b>	
<b>3. Estimate supported by cost guides from independent sources or other federal agencies</b>	
<b>4. Estimates based upon government wage rates and material cost.</b>	
<b>5. No cost estimate required - cost charged to Fire Suppression Account</b>	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

<p><b>List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.</b></p> <p>Standard LRGV NWR Seedling Contract Specifications attached in Appendix V.</p>
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<b>TREATMENT NAME</b>	Seedling Transplant	<b>PART E SPECIFICATION #</b>	5
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2007
<b>NFPORS TREATMENT TYPE *</b>	Biological	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Transplant seedlings of native trees and shrubs.</p> <p><b>B. Location/(Suitable) Sites:</b> Sam Fordyce North Burn site.</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>Seedlings shall be transplanted between October 1, 2006 and November 30, 2006.</li> <li>Seedlings shall be transplanted in ripped rows at spacing specified by Refuge personnel. Measuring ropes, provided by the Refuge, shall be used to measure spacing between seedlings within rows.</li> </ol> <p><b>D. Purpose of Treatment Specifications:</b> Revegetate site of Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will inspect transplanting operation at least once per day and following completion.</p>
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**II. LABOR, MATERIALS AND OTHER COST:**

< <b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
TOTAL PERSONNEL SERVICE COST	n/a
< <b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
< <b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
(All necessary material supplies were previously acquired by the Refuge).	
TOTAL MATERIALS AND SUPPLY COST	n/a
< <b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
< <b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
7,050 seedlings x \$0.30 per seedling	\$2,115

TOTAL CONTRACT COST \$2,115

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	11/30/06	C	Seedling	\$0.30	Transplant seedlings	\$2,115
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$2,115</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--



<b>TREATMENT NAME</b>	Direct seed native grasses and forbs	<b>PART E SPECIFICATION #</b>	6
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2006
<b>NFPORS TREATMENT TYPE *</b>	Biological	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Direct seed native grass and forb seeds.</p> <p><b>B. Location/(Suitable) Sites:</b> Sam Fordyce North Burn site.</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>Seeds shall be planted between August 1, 2006 and September 30, 2006</li> <li>Seeds shall be planted with a no-till rangeland drill, equipped with a fluffy-seed box, at a rate of 20 PLS per square foot.</li> <li>Planting depth shall be controlled at 0.5 cm (0.2 inches).</li> </ol> <p><b>D. Purpose of Treatment Specifications:</b> Revegetate site of Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will inspect seeding operation continuously during operation and following completion. Seed germination and establishment will be monitored at 3 month intervals for 12 months.</p>
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**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
GS 7 @ \$24/hour x 40 hours	
TOTAL PERSONNEL SERVICE COST	\$960
<b>&lt; EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<b>&lt; MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
Native grass and forb seeds @ \$200/ac x 23.5 ac	
TOTAL MATERIALS AND SUPPLY COST	\$4,700
<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST /</b>

	<b>ITEM</b>
n/a	
TOTAL CONTRACT COST	n/a

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/06	9/30/06	FA	acres	\$241	Transplant seedlings	\$5,660
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$5,660</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	C
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

<b>TREATMENT NAME</b>	Spot Application of herbicide	<b>PART E SPECIFICATION #</b>	7
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2007, 2008
<b>NFPORS TREATMENT TYPE *</b>	Biological	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Spot apply glyphosate and/or imazypyr herbicide to buffelgrass</p> <p><b>B. Location/(Suitable) Sites:</b> Sam Fordyce North Burn site.</p> <p><b>C. Design/Construction Specifications:</b></p> <p>Technician will inspect rehabilitation site 4 times per year for two years, and will spot-apply herbicide as needed to buffelgrass.</p> <p><b>D. Purpose of Treatment Specifications:</b> Prevent re-establishment of buffelgrass at Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will sample rehabilitation site to determine % cover of native versus introduced vegetation.</p>
--

**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
GS 7 @ \$24/hour x 32 hours/year x 2 years	
TOTAL PERSONNEL SERVICE COST	\$1,536
<b>&lt; EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<b>&lt; MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
Imazypyr herbicide at \$280/gal x 2 gal	
TOTAL MATERIALS AND SUPPLY COST	\$560
<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL CONTRACT COST	n/a

**SPECIFICATION COST SUMMARY**

<b>FISCAL YEAR</b>	<b>PLANNED INITIATION DATE (M/D/YYYY)</b>	<b>PLANNED COMPLETION DATE (M/D/YYYY)</b>	<b>WORK AGENT</b>	<b>UNITS</b>	<b>UNIT COST</b>	<b>PLANNED ACCOMPLISHMENTS</b>	<b>PLANNED COST</b>
FY2007	10/01/06	9/30/07	FA	Acres	\$45	Treat Invasive Plants	\$1,048
FY__	10/01/07	9/30/08	FA	Acres	\$45	Treat Invasive Plants	\$1,048
FY__							
FY__							
<b>TOTAL</b>							<b>\$2,096</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

<b>1. Estimate obtained from 2-3 independent contractual sources.</b>	
<b>2. Documented cost figures from similar project work obtained from local agency sources.</b>	
<b>3. Estimate supported by cost guides from independent sources or other federal agencies</b>	
<b>4. Estimates based upon government wage rates and material cost.</b>	FA, M
<b>5. No cost estimate required - cost charged to Fire Suppression Account</b>	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

<b>TREATMENT NAME</b>	Water transport and supplemental assistance	<b>PART E SPECIFICATION #</b>	8
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2006
<b>NFPORS TREATMENT TYPE *</b>	Biological	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>		<b>IMPACTED T&amp;E SPECIES</b>	Walker's Manioc

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Transport water to project site for herbicide application; assist in locating and mapping site; equipment transport.</p> <p><b>B. Location/(Suitable) Sites:</b> Sam Fordyce North Burn site.</p> <p><b>C. Design/Construction Specifications:</b></p> <p>Technicians will transport 200 gal water in refuge fire engine, as needed for force-account herbicide application. Other equipment hauling and assistance will be provided as needed to assist in force-account operations.</p> <p><b>D. Purpose of Treatment Specifications:</b> Eradicate buffelgrass at Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p> <p>Refuge personnel will sample rehabilitation site to determine % cover of native versus introduced vegetation.</p>
--

**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
GS 7 @ \$24/hour x 120 hours	
TOTAL PERSONNEL SERVICE COST	\$2,880
<b>&lt; EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<b>&lt; MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL MATERIALS AND SUPPLY COST	n/a
<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2007	10/01/05	9/30/06	FA	Acres	\$123	Treat Invasive Plants	\$2,880
FY__							
FY__							
FY__							
<b>TOTAL</b>							<b>\$2,880</b>

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	FA
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
--

<b>TREATMENT NAME</b>	Planning/Implementation/Monitoring, Plant Ecologist	<b>PART E SPECIFICATION #</b>	9
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2005, 2006, 2007
<b>NFPORS TREATMENT TYPE *</b>	Other Treatment	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>	Colonia Anzaldua	<b>IMPACTED T&amp;E SPECIES</b>	Ocelot, Jaguarundi

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Plan, implement and monitor Sam Fordyce North Burned Area Rehabilitation Plan</p> <p><b>B. Location/(Suitable) Sites:</b> Sam Fordyce North Burn site.</p> <p><b>C. Design/Construction Specifications:</b></p> <ol style="list-style-type: none"> <li>Develop and submit plan before 09/30/05</li> <li>Write contract specifications and monitor contract and force account work through project completion.</li> </ol> <p><b>D. Purpose of Treatment Specifications:</b> Rehabilitate site of Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p>
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**II. LABOR, MATERIALS AND OTHER COST:**

<p>&lt; <b>PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).</p>	<b>COST / ITEM</b>
GS 11 @ \$44/hour x 240 hours	
TOTAL PERSONNEL SERVICE COST	\$10,560
<p>&lt; <b>EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.</p>	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<p>&lt; <b>MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b></p> <p>(All necessary material supplies were previously acquired by the Refuge).</p>	<b>COST / ITEM</b>
TOTAL MATERIALS AND SUPPLY COST	n/a
<p>&lt; <b>TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b></p>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<p>&lt; <b>CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b></p>	<b>COST / ITEM</b>
TOTAL CONTRACT COST	n/a

**SPECIFICATION COST SUMMARY**

<b>FISCAL YEAR</b>	<b>PLANNED INITIATION DATE (M/D/YYYY)</b>	<b>PLANNED COMPLETION DATE (M/D/YYYY)</b>	<b>WORK AGENT</b>	<b>UNITS</b>	<b>UNIT COST</b>	<b>PLANNED ACCOMPLISHMENTS</b>	<b>PLANNED COST</b>
FY2005	09/5/05	09/30/05	FA	Hour	\$44	Project Lead	\$1,056
FY2006	10/01/05	09/30/06	FA	Hour	\$44	Project Lead	\$4,752
FY2007	10/01/06	06/30/07	FA	Hour	\$44	Project Lead	\$4,752
FY__							
<b>TOTAL</b>							\$10,560

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

<b>1. Estimate obtained from 2-3 independent contractual sources.</b>	
<b>2. Documented cost figures from similar project work obtained from local agency sources.</b>	
<b>3. Estimate supported by cost guides from independent sources or other federal agencies</b>	
<b>4. Estimates based upon government wage rates and material cost.</b>	P
<b>5. No cost estimate required - cost charged to Fire Suppression Account</b>	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

<b>List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.</b>
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<b>TREATMENT NAME</b>	Planning/Implementation/Monitoring, Technician	<b>PART E SPECIFICATION #</b>	10
<b>NFPORS TREATMENT CATEGORY*</b>	Other Treatment	<b>FISCAL YEAR(S) (list each year):</b>	2006, 2007
<b>NFPORS TREATMENT TYPE *</b>	Other Treatment	<b>WUI? Y / N</b>	Y
<b>IMPACTED COMMUNITIES AT RISK</b>	Colonia Anzaldua	<b>IMPACTED T&amp;E SPECIES</b>	Ocelot, Jaguarundi

\* See NFPORS Restoration & Rehabilitation module - Edit Treatment screen for applicable entries.

**I. WORK TO BE DONE** (describe or attach exact specifications of work to be done):

<p><b>Number and Describe Each Task:</b></p> <p><b>A. General Description:</b> Implement and monitor Sam Fordyce North Burned Area Rehabilitation Plan</p> <p><b>B. Location/(Suitable) Sites:</b> Sam Fordyce North Burn site.</p> <p><b>C. Design/Construction Specifications:</b></p> <p>2. Monitor contract compliance, create GPS maps of burned areas and treatments, collect data on treatment effectiveness.</p> <p><b>D. Purpose of Treatment Specifications:</b> Rehabilitate site of Sam Fordyce North burn.</p> <p><b>E. Treatment Effectiveness Monitoring Proposed:</b></p>
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**II. LABOR, MATERIALS AND OTHER COST:**

<b>&lt; PERSONNEL SERVICES: (Grade @ Cost/Hours X # Hours X # Fiscal Years = Cost/Item):</b> Do not include contract personnel costs here (see contractor services below).	<b>COST / ITEM</b>
GS 7 @ \$24/hour x 312 hours	
TOTAL PERSONNEL SERVICE COST	\$7,488
<b>&lt; EQUIPMENT PURCHASE, LEASE AND/OR RENT (Item @ Cost/Hour X # of Hours X #Fiscal Years = Cost/Item):</b> Note: Purchases require written justification that demonstrates cost benefits over leasing or renting.	<b>COST / ITEM</b>
TOTAL EQUIPMENT PURCHASE, LEASE OR RENTAL COST	n/a
<b>&lt; MATERIALS AND SUPPLIES (Item @ Cost/Each X Quantity X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
(All necessary material supplies were previously acquired by the Refuge).	
TOTAL MATERIALS AND SUPPLY COST	n/a
<b>&lt; TRAVEL COST (Personnel or Equipment @ Rate X Round Trips X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL TRAVEL COST	n/a
<b>&lt; CONTRACT COST (Labor or Equipment @ Cost/Hour X #Hours X #Fiscal Years = Cost/Item):</b>	<b>COST / ITEM</b>
TOTAL CONTRACT COST	n/a

**SPECIFICATION COST SUMMARY**

FISCAL YEAR	PLANNED INITIATION DATE (M/D/YYYY)	PLANNED COMPLETION DATE (M/D/YYYY)	WORK AGENT	UNITS	UNIT COST	PLANNED ACCOMPLISHMENTS	PLANNED COST
FY2006	01/01/06	09/30/06	FA	Hour	\$24	Monitoring and implementation	\$3,744
FY2007	10/01/06	06/30/07	FA	Hour	\$24	Monitoring and implementation	\$3,744
FY__							
<b>TOTAL</b>							\$7,488

**Work Agent:** CA=Coop Agreement, FA=Force Account, G=Grantee, P=Permitee, SC=Service Contract, TSP=Timber Sales Purchaser, V=Volunteer

**SOURCE OF COST ESTIMATE**

1. Estimate obtained from 2-3 independent contractual sources.	
2. Documented cost figures from similar project work obtained from local agency sources.	
3. Estimate supported by cost guides from independent sources or other federal agencies	
4. Estimates based upon government wage rates and material cost.	P
5. No cost estimate required - cost charged to Fire Suppression Account	

P = Personnel Services, E = Equipment M = Materials/Supplies, T = Travel, C = Contract, F = Suppression

**III. RELEVANT DETAILS, MAPS AND DOCUMENTATION INCLUDED IN THIS REPORT:**

List Relevant Documentation and Cross-Reference Location within the Accomplishment Report.
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## **PART G - RESTORATION REQUIREMENT**

The following are post-rehabilitation implementation, operation, maintenance, monitoring, and evaluation actions beyond three years from fire control to ensure the effectiveness of initial investments. Estimated annual cost and funding source (subactivity) is indicated.

1. Monitor seedling survival and growth rates at 3-month, 6-month and 1-year post-planting (\$384 – 1261).
2. Monitor invasive grass re-colonization and germination from dormant seed at 3-month, 6-month and 1-year post-planting (\$384 – 1261).
3. Spot application of glyphosate or imazypyr herbicide, as needed, at 1- and 2-years post planting (\$1000 – 1261).
4. Monitor native plant and invasive plant densities and relative dominance at 5-years post-planting. (\$1,280 – 1261).
5. Long-term wildfire detection and suppression (\$10,000 – 9141).

## **PART H – CONSULTATIONS**

U.S. Fish and Wildlife Service  
Ernesto Reyes, Wildlife Biologist  
Ecological Services  
956-784-7560

U.S. Fish and Wildlife Service  
Mitchell Sternberg, Wildlife Biologist  
Lower Rio Grande Valley NWR  
956-784-7592

U.S. Fish and Wildlife Service  
Patrick Pearson, Fire Management Officer  
Lower Rio Grande Valley NWR  
956-784-7602

U.S. Fish and Wildlife Service  
Mark Kaib, Regional Fire Ecologist  
Region 2 Regional Office  
505-248-6819

## **APPENDIX I - BURNED AREA ASSESSMENT REPORTS**

1. Sam Fordyce North Burned Area Assessment (attached).

## **APPENDIX II - ENVIRONMENTAL COMPLIANCE**

### **Federal, State, and Private Lands Environmental Compliance Responsibilities**

All projects proposed in the Sam Fordyce North Burned Area Rehabilitation Plan that are prescribed, funded, or implemented by Federal agencies on Federal, State, or private lands are subject to compliance with the National Environmental Policy Act (NEPA) in accordance with the guidelines provided by the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); Department of the Interior and U.S. Fish and Wildlife Service. This Appendix documents the Burned Area Emergency Response team considerations of NEPA compliance requirements for prescribed rehabilitation and monitoring actions described in this plan for all jurisdictions affected by the Sam Fordyce North Fire.

### **Related Plans and Cumulative Impact Analysis**

Sam Fordyce North Burned Area Rehabilitation Plan (*approval date*). The Sam Fordyce North Fire Burned Area Rehabilitation Plan was reviewed and it was determined that actions proposed in the Sam Fordyce North Fire Burned Area Rehabilitation Plan within the boundary of the Sam Fordyce North Fire are consistent with the management objectives established in the Comprehensive Conservation Plan. The Comprehensive Conservation Plan NEPA compliance process (Environmental Assessment) specifically addresses:

- Biological Resources
- Air Quality
- Water Quality
- Wetland Preservation and Enhancement
- Compatibility and Service Policy on Recreational Uses
- Cultural Resources
- Socioeconomics

### **Cumulative Impact Analysis**

Cumulative effects are the environmental impacts resulting from the incremental impacts of a proposed action when added to other past, present, and reasonably foreseeable future actions, both Federal and non-Federal. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. The rehabilitation treatments for areas affected by the Sam Fordyce North Fire, as proposed in the Sam Fordyce North Fire Burned Area Rehabilitation Plan, do not result in an intensity of impact (i.e. major ground disturbance, etc.) that would cumulatively constitute a significant impact on the quality of the environment. The treatments are consistent with the above jurisdictional management plans and associated environmental compliance documents and categorical exclusions listed below.

### **Applicable and Relevant Categorical Exclusions**

The individual actions proposed in this plan for the Sam Fordyce North fire burned area are Categorically Excluded from further environmental analysis as provided for in the Department of Interior and U.S. Fish and Wildlife Service categorical exclusions. All applicable and relevant Department and Agency Categorical Exclusions are listed below. Categorical Exclusion decisions were made with consideration given to the results of required emergency consultations completed by the Burned area emergency response team and documented below.

#### Applicable Department of Interior Categorical Exclusions

516 DM 2 App; 2, 1.6  
516 DM 6 App. 7.4 L (3)

#### Applicable U.S. Fish and Wildlife Service Categorical Exclusions

516 DM 6 App. 1.4 B (1)  
516 DM 6 App. 1.4 B (3) iii  
516 DM 6 App. 1.4 B (5)

### **Statement of Compliance for the Sam Fordyce North Fire Burned Area Rehabilitation Plan.**

This section documents consideration given to the requirements of specific environmental laws in the development of the Sam Fordyce North Fire Burned Area Rehabilitation Plan. Specific consultations initiated or completed during development and implementation of this plan are also documented. The following executive orders and legislative acts have been reviewed as they apply to the Sam Fordyce North Fire Burned Area Rehabilitation Plan:

- National Historic Preservation Act (NHPA).
- Executive Order 11988. Flood plain Management.
- Executive Order 11990. Protection of Wetlands.
- Executive Order 12372. Intergovernmental Review.
- Executive Order 12892. Federal Actions to Address Environmental Justice in Minority and Low-income Populations.
- Endangered Species Act.
- Secretarial Order 3127. Federal Contaminated
- Clean Water Act.
- Clean Air Act.

### **CONSULTATIONS**

Not applicable.

**NEPA Checklist:** If any of the following exception applies, the Burned Area Rehabilitation Plan cannot be Categorically Excluded and an Environmental Assessment (EA) is required.

(Yes) (No)

- (X) Adversely affect Public Health and Safety
- (X) Adversely affect historic or cultural resources, wilderness, wild and scenic rivers aquifers, prime farmlands, wetlands, floodplains, ecologically critical areas, or Natural Landmarks.
- (X) Have highly controversial environmental effects.
- (X) Have highly uncertain environmental effects or involve unique or unknown environmental risks.
- (X) Establish a precedent resulting in significant environmental effects.
- (X) Relates to other actions with individually insignificant but cumulatively significant environmental effects.
- (X) Adversely effects properties listed or eligible for listing in the National Register of Historic Places
- (X) Adversely affect a species listed or proposed to be listed as Threatened or Endangered.
- (X) Threaten to violate any laws or requirements imposed for the "protection of the environment" such as Executive Order 1 1 988 (Floodplain Management) or Executive Order 1 1 990 (Protection of Wetlands).

### **National Historic Preservation Act**

Ground Disturbance:

- None
- Ground disturbance did occur and an archeologist survey, required under section 110 of the NHPA will be prepared. A report will be prepared under contract as specified by the Burned Area Rehabilitation Plan.

A NHPA Clearance Form:

- Is required because the project may have affected a site that is eligible or on the national register. The clearance form is attached. SHPO has been consulted under Section 106 (see Cultural Resource Assessment, Appendix I).
- Is not required because the Burned Area Rehabilitation Plan has no potential to affect cultural resources (initial of cultural resource specialist).

### **Other Requirements**

(Yes) (No)

- (X) Does the Burned Area Rehabilitation Plan have potential to affect any Native American uses? If so, consultation with affiliated tribes is needed.
- ( ) Are any toxic chemicals, including pesticides or treated wood, proposed for use? If so, local agency integrated pest management specialists must be consulted.

I have reviewed the proposals in the Sam Fordyce North Fire Burned Area Rehabilitation Plan in accordance with the criteria above and have determined that the proposed actions would not involve any significant environmental effect. Therefore it is categorically excluded from further environmental (NEPA) review and documentation. Burned area emergency response team technical specialists have completed necessary coordination and consultation to insure compliance with the National Historic Preservation Act, Endangered Species Act, Clean Water Act and other Federal, State and local environment review requirements.

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Wildlife Biologist, Ecological Services

Date

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Project Leader, South Texas Refuges Complex

Date

### **APPENDIX III – MAPS**

- GPS of Sam Fordyce North Fire overlaid on Sullivan City SE Digital Ortho Quarter Quad Color CIR Image.

### **APPENDIX IV - PHOTO DOCUMENTATION**

See attached CD.

## **APPENDIX V - SUPPORT DOCUMENTS**

1. Native / Non-Native Plant Worksheet
2. LRGV NWR Seedling Contract Specifications.